REMARKS

Reconsideration of the present application as amended is respectfully requested. Claims 1-14 and 16-20 have been amended. Claim 15 has been canceled. Claims 1-14 and 16-20 are currently pending.

Claims 1, 2, 4-13, and 15-20 stand rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,996, 987 to Petrofsky ("Petrofsky"). Independent claim 1 has been amended to include the features of "a first switching device for intermittently connecting the output of an electrical power supply to one or more connection probes electrically connected to the subject thus forming active probes"; "a second switching device for intermittently connecting one or more connection probes electrically connected to the subject to form an electrical current return path for current supplied by the electrical power supply thus forming return path probes"; and "wherein the intermittent connection of the output of an electrical power supply and the intermittent formation of electrical current return paths vary during a treatment such that a single connection probe can act as an active probe or a return path probe at different times the selection resulting from the activation of the switching devices and wherein the switching devices act independently of each other."

Applicant respectfully submits that Petrofsky fails to teach or suggest at least these features of independent claim 1 as amended. For example, Applicant respectfully submits that Petrofsky fails to teach or suggest the intermittent connection of an output of an electrical power supply or the intermittent formation of electrical current return paths for connection probes where the intermittent connection occurs as a result of switching the connection of the probes to either an electrical power supply or a current return path as found in independent claim 1 as amended. Further, Applicant respectfully submits that varying formation of "active" probes and "return path" probes during a treatment resulting from activation of switching devices is not taught or suggested by Petrofsky.

Petrofsky describes supplying a signal via an isolation transformer (42) to probes that remain connected at all times to the winding of the isolation transformer (42). Applicant respectfully submits that there is no teaching or suggestion by Petrofsky of independent switching an electrical connection of a probe attached to a subject undergoing treatment in one

instance to an electrical power supply, and in another instance to a current return path. The Office Action refers to column 4, lines 25 to 35 of Petrofsky which describes the switching of a signal supply to a primary (or input) winding of isolation transformer (42). The Office Action also refers to column 6, lines 3 to 9 of Petrofsky which describes switching of different signals (C_1 to C_3) to the primary winding of the isolation transformer (42). Petrofsky describes applying a varying signal to connection probes attached to a subject undergoing treatment in which the varying signal causes current flow between the connection probe to vary back and forth in accordance with the varying signal. Applicant respectfully submits that Petrofsky does not teach or suggest any variation of current flow between connection probes as a result of switching the electrical connection of a probe to or from either a power supply unit or a current return path. The "transition states" described in Petrofsky relating to the periods C_1 to C_3 are not caused by switching of electrodes, nor are they caused by the application of time varying signals directly connected to the electrodes. For at least the foregoing reasons, Applicant respectfully submits that independent claim 1 distinguishes over Petrofsky and requests that the 35 U.S.C. 102(b) rejection of independent claim 1 be withdrawn.

Regarding claim 2, claim 2 is dependent upon and includes the features of independent claim 1. For at least the reasons as discussed with respect to independent claim 1, Applicant respectfully submits that claim 2 also distinguishes over Petrofsky and requests that the 35 U.S.C. 102(b) rejection of claim 2 be withdrawn.

Independent claim 4 as amended is directed to a "method of providing electro stimulation to a subject wherein a plurality of electro stimulation probes are electrically connected at one end to the subject, said probes being electrically switchable to connect another end of the probe to at least either an electrical power supply or a current return path." The method includes the steps of "selecting one or more of the probes for connection to at least one electrical power supply thereby causing said one or more probes to become active probes"; " selecting one or more of the probes for connection to an electrical current return path thereby causing said one or more probes to become return probes"; "connecting said one or more active probes to the at least one electrical power supply and said one or more return probes to an electrical current return path thus causing an electrical current to flow between said active and return probes"; and "altering the selection of active and return probes and switching the probe

connections to accord with the altered selection." For similar reasons as those discussed with respect to independent claim 1, Applicant respectfully submits that independent claim 4 distinguishes over Petrofsky and requests that the 35 U.S.C. 102(b) rejection of independent claim 4 be withdrawn.

Regarding claims 5-12, claims 5-12 are dependent upon and includes the features of independent claim 4. For at least the reasons as discussed with respect to independent claim 4, Applicant respectfully submits that claims 5-12 also distinguish over Petrofsky and requests that the 35 U.S.C. 102(b) rejections of claims 5-12 be withdrawn.

Independent claim 13 has been amended to include the features of "the junction between the return probe and the first resistance is connected to a ground reference through a controllable variable conductance network including a conductance path formed by a collector-emitter path through a transistor in series connection with a second electrical resistance such that the voltage at the junction of the emitter and the second resistance varies proportionally with the electrical current flowing through the area of the subject." Applicant respectfully submits that Petrofsky fails to teach or suggest at least these features of independent claim 13. Further Applicant respectfully submits that there is no teaching or suggestion in Petrofsky of a return path current passing through a controllable, variable conductance network. For at least the foregoing reasons, Applicant respectfully submits that independent claim 13 distinguishes over Petrofsky and requests that the 35 U.S.C. 102(b) rejection of independent claim 13 be withdrawn.

Regarding claims 16-19, claims 16-19 are dependent upon and includes the features of independent claim 13. For at least the reasons as discussed with respect to independent claim 13, Applicant respectfully submits that claims 16-19 also distinguish over Petrofsky and requests that the 35 U.S.C. 102(b) rejections of claims 16-19 be withdrawn.

Regarding independent claim 20, independent claim 20 as amended is directed to a "method of controlling the supply of an electrical current to a subject connected to an electrical power supply unit that is in electrical connection with an area of the subject by at least one active probe and return probe respectively including a first electrical resistance connected in parallel with the at least one active and return probe and having a controllable variable conductance

network connected between the junction of the return probe and the first resistance and a ground reference." The method includes "initially controlling the variable conductance network to present a significantly low conductance such that limited current can flow through the area of the subject" and " subsequently controlling the variable conductance of the network to cause a desired electrical current flow through the area of the subject." For similar reasons as those discussed with respect to independent claim 13, Applicant respectfully submits that Petrofsky fails to teach or suggest all of the features of independent claim 20. For example, Applicant respectfully submits that Petrofsky fails to teach or suggest an electrical resistance connected in parallel with an active and return probe connected to an area of a subject, nor does Petrofsky teach or suggest a controllable variable conductance network connected between a junction of a return probe and a first resistance and a ground reference. For at least the foregoing reasons, Applicant respectfully submits that independent claim 20 distinguishes over Petrofsky and requests that the 35 U.S.C. 102(b) rejection of independent claim 20 be withdrawn.

Claim 3 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Petrofsky in view of U.S. Patent No. 6,631,296 to Parramon et al. ("Parramon"). Claim 3 is dependent upon and includes the features of independent claim 1. The Office Action acknowledges that Petrofsky fails to disclose "the claimed multiplexing device." The Office Action asserts that column 2, lines 10-20 of Parramon describes the claimed multiplexing device. The Office Action further asserts that it would have been obvious to one of ordinary skill in the art to combine the teachings of Petrofsky with those of Parramon. Column 2, lines 10-20 of Parramon describes using an RF coil in a time-multiplexing scheme to provide both the receipt of an RF signal and a voltage conversion function. As discussed with respect to independent claim 1, Petrofsky fails to teach or suggest at least the aforementioned distinguishing features of independent claim 1. Applicant respectfully submits that Parramon also fails to teach or suggest these distinguishing features. Accordingly, even if one of ordinary skill in the art were to combine the teachings of Petrofsky with those of Parramon, Applicant respectfully submits that he or she would not arrive at the invention of claim 3. For at least the foregoing reasons, Applicant respectfully submits that claim 3 distinguishes over Petrofsky in view of Parramon and requests that the 35 U.S.C. 103(a) rejection of claim 3 be withdrawn.

Claim 14 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Petrofsky in view of U.S. Patent No. 5,514,165 to Malaugh et al. ("Malaugh"). Claim 14 is dependent upon and includes the features of independent claim 13. The Office Action acknowledges that Petrofsky fails to disclose "the claimed significantly greater first electrical resistance." The Office Action asserts that column 8, lines 30-40 of Malaugh teaches this difference value. The Office Action further asserts that it would have been obvious to one of ordinary skill in the art to combine the teachings of Petrofsky with those of Malaugh. Column 8, lines 30-40 of Malaugh describes a controller of a high voltage pulsed current (HVPC) electrotherapy stimulation device which determines that if a difference value between a first voltage spike value and a second voltage spike value is greater than a predetermined value for a preselected peak voltage, the controller will disable a HVPC output circuit. As discussed with respect to independent claim 13, Petrofsky fails to teach or suggest at least the aforementioned distinguishing features of independent claim 13. Applicant respectfully submits that Malaugh also fails to teach or suggest these distinguishing features. Accordingly, even if one of ordinary skill in the art were to combine the teachings of Petrofsky with those of Malaugh, Applicant respectfully submits that he or she would not arrive at the invention of claim 14. For at least the foregoing reasons, Applicant respectfully submits that claim 3 distinguishes over Petrofsky in view of Malaugh and requests that the 35 U.S.C. 103(a) rejection of claim 14 be withdrawn.

In view of the above amendment, Applicant believes the pending application is in condition for allowance.

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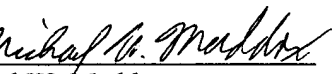
Respectfully submitted,

By 

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